DOCUMENT RESUME

ED 096 214 SO 007 752

AUTHOR	Ho, C. L., Ed.; Chu, S. K., Ed.
TITLE	Teaching Urbanization in Secondary Schools.
INSTITUTION	Hong Kong Education Dept.
PUB DATE	74
NOTE	54p.; Papers read at the Conference on Urban Geography for Secondary School Teachers (Hong Kong, 1973); Published by the Secondary Subject Committee for Geography (Hong Kong)
EDRS PRICE	MF-$0.75 HC-$3.15 PLUS POSTAGE
DESCRIPTORS	City Problems; *Comparative Education; Conference Reports; *Curriculum Development; Developing Nations; Educational Improvement; Geography Instruction; *Human Geography; Instructional Materials; Secondary Education; Simulation; Social Problems; Teaching Methods; *Urbanization; *Urban Studies
IDENTIFIERS	*High School Geography Project; Hong Kong

ABSTRACT

This publication contains papers read at the Conference on Urban Geography for Secondary School Teachers in Hong Kong, 1973, and experimental teaching materials on urban studies based on some of the ideas of the American High School Geography Project. The following papers are included: (1) "Teaching Urbanization" provides general information on new teaching developments; (2) "Urban Growth in Developing Countries" outlines the pattern of urban growth in developing countries in order to give a wider background to the study of urban growth and its associated problems in Hong Kong; and (3) "Urban Studies in Secondary School Geography" suggests concrete examples of the nature and scope of secondary urban studies in Hong Kong. The Teaching Urbanization Kit, which comprises one half of the publication, illustrates how some of the ideas of the American High School Geography Project could be adopted to local use. Objectives, procedure, teaching strategies, and materials for the kit are discussed. (Author/RM)

TEACHING URBANIZATION IN SECONDARY SCHOOLS

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRO
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.

ED 096214

SP 007 752

PUBLISHED BY
THE SECONDARY SUBJECT COMMITTEE FOR GEOGRAPHY
ON BEHALF OF THE
CURRICULUM DEVELOPMENT EDITORIAL BOARD
EDUCATION DEPARTMENT
HONG KONG

CURRICULUM DEVELOPMENT EDITORIAL BOARD

課程發展編輯委員會

ED 096214

Teaching Urbanization in Secondary Schools

Edited by
C. L. Ho & S. K. Chu

Published by
The Secondary Subject Committee for Geography
on behalf of the
Curriculum Development Editorial Board
Education Department
Hong Kong

The articles in this publication record the personal views of the contributors and must not necessarily be taken as expressing the official views of the Education Department Hong Kong.

PRINTED BY THE GOVERNMENT PRINTER
HONG KONG

CONTENTS

	Page
PREFACE	v
TEACHING URBANIZATION A. M. GUNN (University of British Columbia)	1
URBAN GROWTH IN DEVELOPING COUNTRIES D. J. DWYER (University of Hong Kong)	9
URBAN STUDIES IN SECONDARY SCHOOL GEOGRAPHY C. S. LIANG (The Chinese University of Hong Kong)	13
TEACHING URBANIZATION KIT A. M. GUNN (University of British Columbia) and Secondary Subject Committee for Geography, Education Department	17
REFERENCES	45
NOTES ON CONTRIBUTORS	46

PREFACE

THE American High School Geography Project was first developed in 1961 as a joint endeavour of the National Council for Geographic Education and the Association of American Geographers. In 1964 it had moved entirely under the control of the Association of American Geographers, financed by the National Science Foundation. In 1970 it had spent two and a half million U.S. dollars in the nine year task of producing a one-year high school geography course. The two main aims of the Project are stated to be: (1) the improvement of the content of courses in geography and (2) the development of instructive materials for use in new geography courses. Although this Project is designed primarily for teachers and students in American High Schools, it is felt that geography teachers in Hong Kong should be aware of this major achievement in curriculum development and innovation, as the new ideas and teaching strategies advocated by this Project could be adapted and applied to our own teaching situation.

This Project was introduced to the members of the Secondary Subject Committee for Geography in September 1972 by Prof. Angus M. GUNN of University of British Columbia, Canada who was the Assistant Director of this Project. The following year in July, an exhibition of the Project materials was held concurrently with a Conference on Urban Geography for Secondary School Teachers in Hong Kong. At the conference, Prof. Angus M. GUNN read a paper on 'Teaching Urbanization', Prof. D. J. DWYER delivered a lecture on 'Urban Growth in Developing Countries' and Dr. C. S. LIANG spoke on 'Urban Studies in Secondary School Geography'.

Prof. Angus M. GUNN also attended a series of meetings with the Secondary Subject Committee for Geography with a view to developing some kind of experimental teaching materials on urban studies based on some of the ideas of the American High School Geography Project.

This publication includes the papers read at the Conference on Urban Geography for Secondary School Teachers in 1973 and the experimental teaching materials on urban geography developed by Prof. Angus M.

GUNN in association with the Secondary Subject Committee for Geography. Prof. GUNN's paper provides some general information on new developments in the teaching of urbanization in schools; Prof. DWYER's paper outlines the pattern of urban growth in developing countries in order to give a wider background to the study of urban growth and its associated problems in Hong Kong and Dr. LIANG's paper suggests some concrete examples on the nature and scope of urban studies in secondary schools in Hong Kong. The experimental teaching materials on urban studies serve to illustrate how some of the ideas in the American High School Geography Project could be adapted to our local use.

On behalf of the Secondary Subject Committee for Geography I wish to thank all contributors for giving us valuable advice on the subject, to Mrs. L. MOK, Principal Curriculum Planning Officer (Secondary) for taking a keen interest in our work and Mr. A. G. BROWN, Assistant Director of Education (Chief Inspector of Schools) as well as Mr. G. W. PARRY, Deputy Chief Inspector of Schools for their constant guidance.

Finally, I wish to take this opportunity to acknowledge our thanks to The Asia Foundation for their generosities in donating to the Education Department a complete set of materials on the American High School Geography Project, in sponsoring Mr. S. K. CHU, a member of this Department, to attend a course on the Project in the U.S.A. as well as in financing Prof. Angus M. GUNN to come to Hong Kong to advise us on curriculum development in Geography.

C. L. HO,
Convenor,
Secondary Subject Committee for Geography,
Curriculum Development Committee,
Education Department,
Hong Kong.

January 1974.

TEACHING URBANIZATION

Angus M. Gunn

Before I come to the matter suggested by the title of this paper I should like to make a few comments about examinations, integration of subjects, and the kind of geography teacher that we need in the schools.

First, examinations. No teacher will admit that preparation for examinations is the principal task of the school, yet students continue to come out of school with this perception of their school years. Something must be wrong in our teaching. Let me remind you of one or two facts about teaching for examinations as a primary objective:

(1) It is not a very difficult work because you do not have to motivate students: parents, and pupils themselves, and society provide all the motivation needed.

(2) You do not have to do new thinking, you only have to understand what other people have thought out for you.

(3) You only have to work occasionally. Most of the work, by its very nature, has to be done by the student on his or her own.

Because of these three things, it is going to dawn on educational authorities one of these days that you do not have to pay high salaries for such easy work. Many parents can do it, certainly machines can do it.

Teaching for examinations is a low level of professional behaviour. It is also a very destructive approach to education. It is all very well to talk about the importance of examinations for keeping up high standards for those who pass. What about the harm done to those who fail—the majority of students? Are they not as important a consideration as the successful minority? Have you ever wondered, you who have been successful and passed, and all of us here today are in that category, have you ever wondered what it feels like to have your parents, your school, your society and yourself dub you as a failure in life?

Second, integration of subjects. I want to ask what is integration? In the old days it was easy. Content or information defined a subject field. The old regional geography was a subject of this type in which all you had to do was collect information from a number of sources, put it

together in one book and it constituted an integration of subjects. Today, with the explosion of knowledge and with sophistication in the organization of information, disciplines are not defined by content or by the information it stores; rather they are defined by a philosophic point of view. How can one integrate several philosophies? We even wonder what is the nature of a single discipline. What is geography? No single acceptable definition has been found to date. How then can you have disciplined learning if you have no discipline. How can you have integration of disciplines if you cannot define what you are integrating? I mention these negative points because the history of integration of subjects has been full of weak thinking. My point here is that we should think very carefully about what we are doing before we do it. My recommendation is that we need to ask educational questions –not abstract questions about university disciplines– then, as it were, let the chips fall where they may. We should not be asking how can school curricula be shaped to fit our particular and unique philosophy of geography but what do we want to do with school children? Can geography help us? If it cannot, we must go to some other resource.

Third, the kind of geographer we need in schools. This is perhaps my main point here today as we face the challenges of the weaknesses of the present school geography. I feel that it is most important that we get a certain kind of geography teacher in the schools before we can go very far with meeting the objections of so many people. Some of the things that have happened in recent years have made it essential to focus on the learning process before we worry about content. Schools are no longer considered as prep. institutions for universities. Even if we attempted to do that today, we would be frustrated by the turmoil that is taking place in university curricula. New universities are appearing in England and elsewhere with no departments of geography at all. Concept Development –the main work of the teacher, requires a very detailed knowledge of the way in which young people learn. Concepts have become the main building blocks of knowledge and we are learning that concepts cannot be transferred by words from one person to another. They involve a whole storage system in each individual's memory, something like the computer-graphics devices used in very complicated architectural and aerodynamic engineering. Let me put the problem of the kind of geography teacher we need in schools in this way.

We need teachers who can devise broad aims that derive from the learner and his world, not from a content area or discipline *per se*. I say broad aims because they must encompass a wide range of interests and abilities.

Let me say here as an aside that there is absolutely no basis for saying that broad areas of study are less intellectually challenging or less disciplined than narrow areas of study. Having devised those broad aims, the kind of geography teacher we need can then go on to devise teaching approaches suitable for these aims. Then, and only then can we turn to geography as a discipline for help in relation to content and procedures. I am glad to say that the Scottish Working Party on Geography Curriculum for the S1 and S2 years has already started to move in this direction. They are working within the frameworks that derive from the issues confronting mankind: Population Pressure, Resources Depletion and Urbanization. Let me in conclusion quote from a well-known Asian leader who spoke in the International Geographical Union Conference in Singapore last year. I am quoting here from the Straits Times of September 1972, Dr. LEE said this 'It may not be at all out of place to include certain aspects of population control or family planning in the school curriculum. Similarly the findings of manpower science may be more significant today than that of pure demography. Again, the availability of offshore capital and technology may be more vital than the actual location of minerals. At the same time, we should concern ourselves with the disruption of the ecological balance due to the exploitation of mineral and agricultural resources, and the pollution of the environment by industrialization. These are current issues of growing public concern which affect the lives and future of our people of which they should understand clearly. The curricula, syllabi and textbooks of geography should therefore always drive to emphasize those factors which have the greatest significance in the contemporary issues of the country and region concerned'.

Urbanization is a broad field of study involving the perspectives of many university disciplines, city planners, and social philosophers. While the field cannot be prempted by geography teachers it nevertheless is an ideal setting for the exercise of his skills. It is highly relevant to the human domain worldwide, it is broadbased and therefore provides scope for a wide range of student interests and abilities, it is a local study for most students and, most important of all, it is the setting in which most school leavers will live and apply their knowledge.

Urbanization is a process word. It is not static; not a product; not a slice of time. It is the contemporary dynamic situation in which the focus is the forces at work, not the end product of their efforts. Process study is essential if students are to cope with the explosion of knowledge and be prepared for tomorrow's challenges. Process study must be closely related

to the real life of the student if long-term results are to be achieved. You cannot prepare isolated process skills—scientific method, map skills, decision-making—with a view to their use at some future time. The only skills that have utility tomorrow are those that are developed today in the immediate world of the student.

The following notes suggest content and teaching approaches for the study of urbanization, then go on to unite these two elements in curriculum models that have proved to be successful in five countries.

Content themes:

(1) Change. The destruction of old buildings and the erection of new ones, widening of streets changing neighbourhoods, and disputes over zoning all illustrate the process of change and its effects on the citizens. New buildings, roads, or bridges provide opportunity for one type of study. Decaying areas and changing land uses provide others. Two areas that proved particularly rich opportunities are the margins of business districts and the outer limits of the city.

(2) Competition for space. Locations in and around a city are usually suitable for more than one activity and competition therefore develops for the use of space. A study of land values will explain much about the spatial organization of the city. The physical, social, economic, and aesthetic implications of the city as a place for people must remain in the forefront of student concerns. Typically the following topics will appear—land speculation, urban renewal, expropriation, citizens' rights.

(3) Transportation. The pattern of traffic flows within a city reflects the distributions of population and land uses. The supply of water, electricity, fuels requires other forms of transportation. Perhaps the French word 'circulation', implying movement of goods, people and ideas is a better label for the kinds of study envisaged here. Students can examine choices between road-widening, building an expressway, or providing rapid transit.

(4) The impact of human groups. People create cities. Much of a city is a mosaic of many cultural backgrounds, social interests, and economic levels. Many of the city's most pressing problems stem from differences in ethnic origins, population densities, educational achievements, and income levels. Students need to consider slums, ghettos, overcrowding, crime, and disease.

(5) The costs of growth. What are the costs of living in a modern city? Some of these costs may be difficult to measure—deterioration in the environment and restrictions on a person's style of living for example. All costs must be measured against such advantages as convenience of services, availability of concert halls or sports grounds, higher standards of living. In recent years the costs of city services have risen enormously and the question that must be faced is, who should pay for these services?

Teaching Approaches:

(1) The opener field trip. The purpose of an opener is two-fold: it provides an opportunity for the teacher to introduce a sequence of lessons, and it enables him to assess what the student already knows about the topic. One approach that stresses the latter would see a class divided into two groups, one to be given the task of identifying pleasant features of a field trip, the other to distinguish unpleasant characteristics. On return to class the choices are debated and a consensus sought for an agreed list of say six items in each of the two categories. In the process the teacher will discover the depth and the breadth of his students' grasp of the urban scene.

(2) The draw-in. This technique is essentially a simulation of the growth of a city. Students choose locations for given stages of development by drawing the development on a large mural. At a given point, problems arise and the students are faced with the job of providing a solution. Since they designed the city in the first place, they are more likely to take seriously the various possible solutions. The simulation can be devised to replicate conditions in any given area.

(3) Concept development. Concepts are the building blocks of knowledge and no series of lessons can be complete without them. They are normally built up from visual and other sensory impressions. Later they can be developed by verbal means once a base of experiential data has been established. The following checklist is a useful framework for this important aspect of teaching.

CHECKLIST OF EMPIRICAL CONDITIONS FOR CONCEPT TEACHING

	YES	*NO*
A. Referents:		
1. Is there a referent present, which characterizes the concept being taught?	_____	_____
2. Can the referent be seen clearly by each pupil?	_____	_____

	YES	NO
3. Has the referent with which the pupil will have *initial* contact been simplified by reducing the number of irrelevant characteristics?	_____	_____
4. Have the defining characteristics been altered so that they are more readily apparent than the principal non-defining characteristics?	_____	_____
5. Are there negative cases present as well as positive cases?	_____	_____
6. Do the referents available to the pupil reflect the boundaries of the concept class?	_____	_____
7. Do the referents available to the pupil reflect degrees of complexity ranging from abstract representation through to the most complex instance which the pupil is expected to know?	_____	_____
B. Conditions:		
1. Was referent available throughout the period of instruction for sufficient time to permit		
(*a*) the pupil to differentiate clearly the various elements of the referent?	_____	_____
(*b*) consolidation to occur?	_____	_____
(*c*) the pupil to re-examine referent after receiving feed back or other information?	_____	_____
2. Were characteristics of referent		
(*a*) clearly differentiated and identified?	_____	_____
(*b*) labelled?	_____	_____
3. Was the relationship of the referent to other classes and sub-classes clearly indicated?	_____	_____
4. Did pupils probably have the necessary pre-requisite knowledge skills etc., to learn the concept?	_____	_____
5. Did pupils have repeated opportunity to verbalize the concept?	_____	_____

(4) Hypothesis testing using census data. There are many widespread assumptions about life in a city—poverty and crime is always found in the oldest or most densely populated sections, highest densities are in the city centre etc. Census data should be approached with one of these assumptions, or hypotheses, and used to confirm or refute the hypothesis. Often the hypothesis will be partly refuted. The reasons for the partial refutation together with the creation of refined hypotheses then constitute the most valuable educational aspects of the exercise.

(5) Hypothesis testing in the field. This approach is similar to the previous one except that the data is raw, without the interpretations that inevitably arise in the compilation of census data. It is therefore more

scientific, more of an empirical study. A hypothesis such as 'Rush hour traffic is worst at 8.30 and at 4.30' can be tested by traffic counts at specified points over the period 7.30 to 9.30 and 3.30 to 5.30. Again discussion of differences between observed data and initial hypothesis will be the most valuable educational component.

Curriculum Models:

(1) *England:* the urban slum. This model was developed in an elementary school in southeast London in an area where there were many extremely deprived school children whose only form of expression was violence. Over a period of time the staff of an experimental school in the area selected topics that allowed children to express imagination and fantasy with respect to the future rather than to past experience. In this way an inner confidence was developed, an acceptance of others began to appear because of the non-authoritarian atmosphere of the classroom, and an ability to express themselves in ways other than violence was the result. Activities involved drama, art, poetry, writing. Topics for study included: the ideal home (of the future); my mother and father (children imagined that they were now fathers and mothers and they were describing their children); fear of ghosts; descriptions of people suffering from mental poor health; descriptions of murderers and their victims.

(2) *Germany:* downtown development. A very full documentation of the town of Coburg, in South Germany (population of 50,000) is presented to the students. This includes planners, hopes for the future as well as a record of past. In addition to the written material there is also provided a set of colour slides, several overhead transparencies, maps of recommended land uses. Students are then presented with a hypothetical problem based on this city. They are asked to role play as community leaders faced with a request for a new downtown shopping centre. They have to decide how to cope with all the implications of a decision either way.

(3) *Israel:* 'work' city and 'leisure' city. Students are taken on a series of field trips in which they examine and evaluate various facets of specific cities. They are then presented with generalized models of typical Israeli cities and asked to predict where the areas they saw on the various field trips would most likely be located. Cities of 50,000 and 100,000 are assumed in the models provided.

(4) *United States:* site and situation prediction. Students are given several maps and asked to select in each case which one of four possible sites is most likely to develop into a major settlement. Each may represent

a different point of time. Following this exercise and the awareness it brings of the factors affecting settlements at different periods of history, students are asked to apply their knowledge to a wider setting. They are given maps of the eastern half of the United States and asked to predict where future settlement will appear: e.g. they are given maps of 1800 and asked to predict for 1830, and maps of 1830 and asked to predict for 1890. Following predictions the students are given actual documentary materials for 1830 and 1890 and then asked to discuss the differences between their predictions and the actual historical data. One of the questions asked by the teacher in this discussion goes something like the following: what additional information would you like to have had before you made your prediction?

(5) *Canada:* multi-media open-ended kit. The National Film Board kit on Toronto is typical of Canadian teaching materials and methods in many parts of the country. A multi-media kit is provided for the teacher, all of it dealing with the two million population city of Toronto. This kit includes a textbook, a filmstrip, a set of color slides, several overhead transparencies, several topographic maps, a class set of black and white photographs. No suggestions are given for the use of the materials. It is assumed that the teacher through his or her own personal knowledge or through the use of reference material will determine the best method for his class.

This Canadian model because it is so open-ended can be used at both elementary and secondary levels of instruction. The other models are more specific—No. 1 is elementary, Nos. 2, 3 and 4 are secondary. The teaching approaches are, of course, much more general and can be used at any level of the school system.

URBAN GROWTH IN DEVELOPING COUNTRIES

D. J. DWYER

URBAN growth is now proceeding with unprecedented speed in the developing countries and giving rise to a host of problems most of which can be studied in the field in Hong Kong. The purpose of this paper is to outline the pattern of urban growth as far as the developing countries generally are concerned in order to provide a wider background to the study of urban growth and its associated problems in Hong Kong.

It is thought that between 1800 and 1970 the population of the world living in towns of 5,000 inhabitants or more increased from 81 millions to 1,399 millions, or by 17 times. Total world population grew much more slowly, in fact by a little less than 3 times over the same period. The last one hundred and fifty years or so has therefore seen a revolutionary shift in the location of the world population and in the relative importance of city and countryside. Nevertheless, the earth as a whole is not yet very highly urbanized. The transition to a fully urbanized world —that is one as urbanized as the United States or Britain today—is proceeding so rapidly, however, that it may be completed within less than a century, given a continuation of present trends. This urban transition and the prospect of lives of grinding poverty for the vast majority of Third World urban populations surely pose some of most fundamental issues of our times.

Much of the future development towards a fully urbanized world will concern the Third World, though historically the process has been led by the today's industrialised countries. The urban process is by no means new—there were cities over five thousand years ago—but before the Industrial Revolution towns were relatively few. The acceleration in the urbanization process which occurred during the early nineteenth century was associated with industrialization and it affected first the countries of Western Europe and the U.S.A. The new industries in these countries made such demands that in the long run the period of European industrialization and urbanization must be regarded as one characterized by shortage of labour. At the same time, health conditions in the cities were so poor that by no means all of their population growth occurred through natural

increase. Their growth was often due to their power to attract rural migrants. Concurrently, the rationalization and technical development of agriculture allowed declining rural populations to participate, on the whole, in rising living standards resulting from national economic growth.

Today, there are two distinct facets within the general urbanization trend. The industrialized countries are showing declining rates, but because they include only one quarter of the world's population this has not been sufficient to retard the trend. The massive populations of the Third World, in contrast, appear to be still in the earlier stages of an urbanization more massive than any before.

Unlike the early industrial cities, contemporary cities in the Third World are not death-traps; in fact their health records are almost as good as today's cities in industrialized countries, and they are far better than those of the Third World's rural areas. The Third World city has benefited disproportionately from the conquest of death that has taken place in the tropics during the last three or four decades, while at the same time the fertility of its inhabitants has remained very high both by the contemporary and by the historical standards of the cities of the industrialised countries. It has been reported, for example, that city-dwelling Moslem couples interviewed in Lebanon in 1957 had a fertility that would yield 6.6 children to each wife if she lived through the reproductive period. In Accra, Ghana, the figure in 1960 was 6 children; in Bangalore, India, the average women aged 45 and over had borne 5.3 children.

This combination of 'pre-industrial fertility and post-industrial mortality', as it has been called, has given the contemporary Third World city the greatest rates of natural increase ever found in cities. Yet rural-urban migration is also proceeding apace. The Third World today is the scene of the greatest movements of people in history, and though the waves of political refugees from war-torn areas usually make the headlines, it is a quieter, spontaneous movement of people from the countryside to the cities which constitutes the mainstream. Paradoxically, the rate of urbanization and the current size of the major cities throughout the developing world seem more expressions of lack of economic development than the results of it. There is often a marked lack of coincidence between rates of urbanization and those of industrialization. Conditions in the cities, poor though they may be, nevertheless seem to be becoming increasingly preferred by the rural masses, and it can only be concluded that this largely reflects the abysmal lack of development in the countryside.

The result is a swelling tide of rural-urban migration. To take the case of metropolitan Manila as an illustration, the projected 1977 population of the city based upon a rate of natural increase of 3.2% alone (the projected national average rate of population growth for the period 1955–77) would be 3.7 millions. But the lowest United Nations estimate of actual population for the city in 1977, based upon its current rate of growth, is 5.1 millions, indicating the addition of almost one and a half million in-migrants and their children during the decades of the sixties and the seventies. The United Nations 'high estimate' for the 1977 population of Metropolitan Manila is 6.2 millions. What makes such figures even more disturbing is that so far urban growth in the developing world, significant though it has been in recent decades, has made but little impression upon the vast reservoirs of population in the countryside. Figures for Venezuela show that while the number of people living in urban areas (in this case towns and cities of 5,000 or more inhabitants) increased massively from 0.74 to 4.3 millions during the period 1936–61, the nation's non-urban population also grew, from 2.6 to 3.2 millions. In all, probably just over one-half of the current growth of cities in underdeveloped countries can be attributed to in-migration.

As a result of these trends, the balance of urban populations between the industrialized countries and the Third World is in process of most significant change. Urban populations in the developing countries are now growing twice as fast as those in the industrialized countries; they are growing in numbers greatly exceeding those of the industrialized countries even during the periods of the latter's most rapid growth.

In consequence, whereas the population in settlements of 20,000 inhabitants or more in the industrialized countries grew from 198 millions in 1920 to 450 millions in 1960, or more than doubled, this increase was dwarfed by a quadrupling of similar populations in the Third World, from 69 to 310 millions. The growth of such populations in the industrialized countries is expected to amount to 211 millions during the period 1960 to 1980 and to 240 millions during the period 1980 to 2000. However, in the Third World an additional 383 and 743 millions respectively is expected for each period, and by the year 2000 the Third World should account for 1,436 millions of the expected world total of 2,337 millions living in settlements of 20,000 or more. By the end of the present century the balance of world urban population will have clearly tipped towards the Third World, indeed at present we are just over the point of equilibrium in urban population distribution between the industrialized and

the developing countries. We may have reached the end of an era of association of urbanization with Western-style industrialization and socio-economic characteristics. The magnitudes alone of some of the urban increments expected in the Third World are such that it will probably become increasingly debatable to what extent this urbanization can be related to very much that is meaningful in past Western urban experience.

There are of course significant differences both in rates of urbanization in the distribution of urban populations within the Third World itself. Africa is the least urbanized of the major regions but also the one which is now urbanizing the most rapidly. There is a marked difference within Africa, however, between the countries north of the Sahara, which already have reached a level of urbanization comparable to that of Southern Europe, and those to the south which, with the exception of South Africa, as a group are the least urbanized on earth outside of Oceania.

A similar dichotomy is apparent in Latin America, in general by far the most highly urbanized major region of the Third World, between Venezuela, Chile, the River Plate countries and the remainder. The urban problems of Africa and Latin America, severe as they may be, are dwarfed by those of Asia which, largely because of the vastness of its total population, is already an urban colossus even in comparison with the industrialized countries. It has been estimated that in 1960 Asia contained between 36 and 39 per cent of the total world population in towns of 20,000 inhabitants or more, depending upon how China's urban population was estimated. This compares with 5% for Africa and 9–10% for Latin America, with 23–24% for Europe (excluding the U.S.S.R.) and with 12–13% for North America. In terms of bald statistics, Asia's probable urban future is indeed frightening, for it is expected that by the year 2000 its urban population, even defined at the relatively high cut-off point of 20,000 persons, will have increased to 993 millions. This compares with a 1960 level of 265 millions, when already in terms of their physical facilities many of Asia's cities were being described as in a state of crisis.

There will be about 6 billion people on earth by the year 2000 and as many as one half of them may be urban, if the size criteria used to define urban settlement is considered as a more realistic 5,000 persons. The staggering task for the second half of the present century is to provide a tolerable urban environment for an increment of people four times as large as that which was added to world urban populations in the hundred years before 1950. This is in addition to making up past deficiencies in urban facilities of massive proportions.

URBAN STUDIES IN SECONDARY SCHOOL GEOGRAPHY

C. S. LIANG

The Problem

THE accelerated development of theoretical and quantitative work in geography over the past two decades has been most conspicuous in the field of urban geography. However, urban studies have been comparatively neglected in the syllabus of secondary school geography. This discrepancy is noticeable and should be diminished as soon as possible. Some geographers have considered that the lack of a statistics course in secondary school has made the students difficult to understand the theories in urban geography. But this may not be true. Not all urban studies require complicated quantitative analysis. A greater part of features in urban geography can be interpreted through literary description. Sometimes, a simple index or coefficient would be very useful for students to understand complex urban activities. In other words, the difficulty in methodology is not the chief hindrance in studying urban geography for secondary school students. The problem is how to arrange urban studies appropriately in the syllabus, and how to teach them in a simpler manner. Hong Kong students are living in a densely-populated, rapidly-growing urban community, they should be interested in learning more on urban functions and spatial structure of urban activities. We are urged to consider what are suitable to be included in the syllabus of secondary school geography.

The Scope of Urban Studies in Secondary School Geography

Four categories are considered suitable for inclusion in the syllabus of secondary school geography:

(A) The origin and formation of cities and urban systems:

The understanding of this knowledge includes the interpretation of the differences between rural and urban communities, relationship between city and its region, and the spatial system of urban activities.

(B) Classification of urban land use:

This is a systematic description of various occupances of urban land. In this connection, the speaker would like to introduce a

coding system of classification of urban land use suitable for use in Hong Kong.

(C) Simple methods of field studies in urban land use:

These include field observations directed and interpreted by teachers for students of the Junior Forms; and more complicated survey and calculation work of some simple indices for students of the Senior Forms. The latter should be instructed and arranged carefully by the teacher in classroom in advance.

(D) The functional areas: Their characteristics and inter-relationship:

These include the CBD, various types of residential areas, industrial area, governmental, public and institutional land-use areas and other functional areas.

Some Proposed Topics

The following proposed topics are tentatively arranged in order of their degree of complication:

(1) Three types of economic activities.

(*a*) Primary production (agriculture, fishing, livestock ranching, lumbering, etc.) (*b*) Secondary production (manufacturing and transportation) (*c*) Tertiary activities (commercial activities, services, tourist industries, etc.).

(2) Differences between rural and urban settlements.

e.g. taking Luen Wo Market and its surrounding rural settlements in Fanling Plain as examples.

(3) Relationship between a central place and its region.

e.g. taking Yuen Long Market and Yuen Long Plain as examples.

(4) City block as a unit of urban studies.

Method of delimiting a city block, attention should be drawn to the relationship between the area of a city block and its location.

(5) Commercial land use.

Commercial activities can be classified into retail businesses, service businesses, and wholesale businesses. The characteristics of a planned shopping centre should be described, taking Ocean Terminal as an example. Field observations to differentiate three types of businesses should be undertaken.

(6) Residential land use.

In Hong Kong, residential land use can be classified into (*a*) High-Class houses-with-gardens (e.g. Mid-Levels of Hong Kong Island, Kowloon Tong in Kowloon); (*b*) Middle-Class multi-storey residential building (e.g. Sham Shui Po); (*c*) Low-Class resettlement and government-aided housing estates (e.g. Shek Kip Mei, Wong Tai Sin, etc.); and (*d*) Squatters (e.g. Tai Hang area in Hong Kong Island).

(7) Industrial land use.

For the purpose of simplicity, industrial land use in Hong Kong can be classified into large industrial estates and small handicraft workshops, examples can be found in Sham Shui Po District.

(8) Public and institutional land uses.

These are classified into (*a*) Schools, (*b*) Churches and temples, and (*c*) Societies and clubs.

(9) Governmental land use.

This can take the Central Government Offices at Ice House Street as an example. The consulates and other governmental buildings except offices can also be included in this land-use type.

(10) Transportation, military, and warehouses land uses.

e.g. Kowloon-Canton Railway Station, multi-storey car parks, barracks, large godowns along the waterfront of Tsim Sha Tsui and West Point.

(11) Park, public playing ground, and recreational open space.

e.g. Victoria Park, Race Course in Happy Valley, etc.

(12) Urban land use survey.

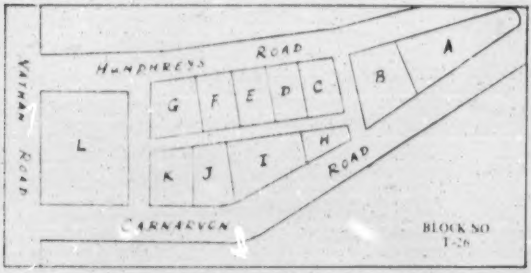
The arrangement and methods of urban land use survey will be interpreted briefly by the speaker. An example of a completed Urban Land Use Inventory Form is shown on p. 16.

(13) Calculation of the simple indices and their use in urban land-use study.

Three indices are introduced: The Total Height Index (THI), the Central Business Height Index (CBHI), and the Central Business Intensity Index (CBII).

(14) The Characteristics of functional areas in Hong Kong.

Field investigations should be undertaken under the direction of the teacher. The CBD on Hong Kong Island would be most attractive for students.



Chung Chi College
URBAN LAND USE SURVEY
Land Use Inventory

Block No
Surveyor
Date

Bl.	Unit	% of Floor Area									Land Use and Number of Establishments
		C_1	C_2	C_3	R	E	G	P	GO	V	
A	U_1	80	20								$C_{11}(4)$, $C_{12}(3)$, $C_{13}(1)$, $C_{15}(1)$, $C_{16}(1)$, $C_{17}(1)$, $C_{18}(1)$, $C_{19}(1)$, $C_{20}(2)$, $C_{21}(1)$, $C_{22}(1)$, $C_{24}(2)$
		2			50			50			R_3, $P_3(1)$
		3		50	25	25					$C_3 25(3)$, R_3, $I_2(2)$.
		4			100						R_3
		5			100						R_3
		6		25	75						$C_5 25(2)$, R_3
		7			100						R_3
		8			100						R_3
		9		25	75						$C_4 3(1)$, R_3
B	U_1	100									$C_7 1(3)$, $C_7 3(1)$, $C_{10}(3)$, $C_7 5(1)$, $C_{14}(1)$, $C_7 1(1)$, $C_7 5(1)$, $C_{18}(1)$, $C_7 25(1)$, $C_{26}(1)$
		2		25	75						$C_3 25(1)$, R_3.
		3			75	25					R_3, $I_2(1)$.
		4		25	75						R_3, $C_5 25(1)$
		5		75	25						$C_3 25(3)$, $C_6(1)$, R_3
		6			75			25			R_3, $P_5(1)$
		7		25	50			25			R_3, $C_5 25(1)$, $P_5(1)$
		8			100						R_3
		9			100						R_3
		10			100						R_3
C	U_1	50	50								$C_{11}(2)$, $C_{17}(1)$, $C_{17}(1)$, $C_{25}(1)$, $C_{26}(1)$
		2		25	75						R_3, $C_5 25(1)$

An example of the completed Urban Land Use Inventory Form (For interpretation, see 'A Systematic Approach to Human & Economic Geography' by C. S. LIANG & P. L. LIANG)

TEACHING URBANIZATION KIT

TEACHING URBANIZATION KIT*

(Developed by Professor Angus M. GUNN, University of British Columbia, in association with the Secondary Subject Committee for Geography, Education Department, Hong Kong.)

OVERVIEW CHART OF THE OBJECTIVES, PROCEDURE, TEACHING STRATEGIES AND MATERIALS FOR THE TEACHING URBANIZATION KIT

ACTIVITY	OBJECTIVES	PROCEDURE	TEACHING STRATEGIES	MATERIALS
IA. Stereotype of Cities	IA. To heighten interest in the study of cities.	IA. (1) General introduction. (2) Students are shown 2 sets of slides, 1 familiar and 1 unfamiliar.	Question and Answer and Discussion.	Slides.
IB. Identification of Similarities and Differences among cities (Teaching time in 40 min. class periods: 4)	IB. (1) To accustom pupils in the using of reference materials. (2) To understand the similarities and differences among Hong Kong and 4 other major cities of S.E. Asia (Singapore, Bangkok, Jakarta, Manila).	IB. (1) Students are presented with a mixed collection of Asia and world city slides. (2) Students are presented with slides of 5 Asian cities.		Slides.
IIA. Site Diagram	IIA. To identify students' knowledge & powers of reasoning.	IIA. Students study hypothetical site diagram of a typical Asian city.	Small group work.	Site Diagram.
IIB. Prediction of City Growth (Teaching time in 40 min. class periods: 4)	IIB. (1) To introduce students to the growth of some of the major cities in S.E. Asia & some of the factors affecting their growth. (2) To develop an open-ended approach to structures of knowledge.	IIB. (1) Discussion of the situation of S.E. Asia city sizes between 1900 and 1910 in terms of population with reference to some effects of World War I. (2) Students predict the growth of 2 biggest cities for 1930–1940 and are then shown the actual situation. The differences are subsequently discussed. (3) Repeat procedures in (2) for 1965 and 1971 respectively, each time with more background information provided. Students are to predict the one biggest city in each case.	Discussion. Prediction. Discussion. Prediction.	Overhead Transparencies (i) S.E. Asia cities 1900–1910 (ii) S.E. Asia cities 1930–1940. Map of S.E. Asia cities showing size of cities around 1965. Maps of S.E. Asia for 1942 and 1972 together with world population data for 1971. Population table of S.E. Asia cities in 1971.

III.	Field Studies	To establish visual perception and some grasp of function for 5 categories of land use viz. public building, warehouses, commercial residential structures, park space, public transportation.	(1) Take students on a local urban field trip e.g. The Tsim Sha Tsui Area to study the land use of the area. (2) Debriefing of the field trip and making the pupils aware of the 'goodness' or 'badness' of the areas seen.	5 slides showing Lower Kowloon Peninsula Discussion.
IV.	Land Use Simulation (The Railway Yard Areas in Tsim Sha Tsui) (Teaching time in 40-min. class periods: 4)	(1) To accustom pupils to transfer knowledge about land use to graphic form. (2) To decide where different kinds of urban land use should be located and justify their decisions.	(1) Part 1 (*a*) Discuss with pupils the land use of Lower Kowloon (except the Railway Yard). (*b*) Discuss the considerations for land use simulation. (2) Part 2 (*a*) Pupils in 3 groups playing 3 different roles each discuss and decide on the future land use of the Railway Yards in Tsim Sha Tsui. (3) Part 3 (*a*) Leader of each group presents their rationales. (*b*) General discussion of all the reports. (4) Part 4 (*a*) Decide on a composite map incorporating the best ideas from all the groups. (*b*) Compare with the official proposed plan for the Railway Yards and discuss their differences.	Aerial photos of Kowloon. Kowloon Land Use Plan (1). Student sheet listing the consideration of land use. Discussion. Large maps of the Railway Yards Planning Area. Discussion. Role sheets. Profile sheets. Discussion. Large map of the Railway Yard Planning Area. Discussion. Kowloon Land Use Plan (2).

* For further details concerning the Kit, teachers are requested to contact the Inspector (Geography), Education Dept., Hong Kong.

INTRODUCTION

In terms of the effectiveness of classroom teaching it is a truism that the method of teaching a subject is more important than the content. Methods of teaching imply considerations of the world of the learner, of the teacher, and of the society that influences the school. In the series of activities that follow we are dealing with only a few of these considerations—some four proven ways of teaching and one broad curriculum structure that will make provision for the many interests and different levels of backgrounds to be found in any one class. The four ways of teaching are: Similarities and Differences, Prediction, Field Study, and Simulation. The curriculum structure is urbanization.

Proven new ways of teaching are more difficult for teachers to accept than are new structures of knowledge. The reason for this difficulty is that teachers were trained in an examination-based system where content was all important and ways of teaching were largely ignored. The problem of developing an understanding of the lives of students who will not be going to university is the first thing we must tackle. It is a great temptation to say 'Students should be educated the way we were because, after all, *we* are perfect'.

It is equally important that teachers do not think that these new ways of teaching are just for 'dumb' students who cannot pass examinations. The fact is that passing examinations is not very good learning. You soon forget what you learned, as a test of your school years would easily show. If we want learning that lasts for many years, then all students—those who go on to university and those who do not—must be taught in ways that give much greater attention to the world of the learner. Comprehension and memorization of content that has been thought out by others is quite unacceptable for the kind of learning that lasts.

Activity I: Similarities and Differences among Cities

World studies in the past have tended to emphasize differences between peoples and places. Geography studies, for example, frequently studied the world country by country, or continent by continent, or more recently, physical region by physical region, or culture area by culture area. In each case the differential characteristics dominated the study. It was a small step from an emphasis on difference to a value differential, and it became commonplace for young people to regard places and peoples that were different as being inferior.

The notion of the inferiority of certain peoples was still further emphasized in the nineteenth century when European and American leaders ascribed superiority to those peoples who were 'Smart' enough to develop industrial-urban societies. Differences had by that time become firmly established in Western minds as synonyms for the 'inferior' non-Western countries.

Notions of inferiority and superiority are not removed by providing more accurate information about the world. More than 2,000 years ago Socrates discovered the inadequacy of rational processes for correcting bias or mind-set. Values which relate to status have deeper roots than the rational aspects of thought and there is no simple solution for them. Yet it is essential that efforts be made to remove all notions of inferiority when applied to people as a whole. Otherwise hopes of intercultural and international understanding are faint indeed.

Some recent research has shown that if, instead of the differences between places initial stress with early secondary students is laid on the similarities between places, there is a marked increase in positive attitudes toward and interest in countries that are quite different to the student's own country. It has also been shown that mind-set can be disturbed by a carefully designed sequence of learning experiences so that students are made aware of the limitations in their mental maps of other places. The classroom activities suggested here are based on these two approaches. No. 1 is a preparation for 2 and 3.

1. Students are shown 6 slides of world cities and asked to match them with 8 countries, names of which are provided. The clues in each slide will be fairly clear so that a high degree of success is achieved. The students are then presented with 7 slides that provide unusual aspects of world cities and they are asked to match them with 5 continents. The clues are not very obvious and the result should show a statistical bias in favour of whatever mind-set is being attached.

2. Students are presented with 2 slides of each of 5 Asia cities (Hong Kong, Bangkok, Singapore, Manila, Jakarta) mixed in with 10 slides of cities from other parts of the world. They are asked to identify each slide in terms of either Asia or somewhere else. (Similarities).

3. The exercise is repeated with a second set of 2 slides on each of the same 5 cities. This time the students are asked to identify the

city. They are given the names of the 5 cities (differences). In between 1 and 2 and after 2 there can be teaching and discussion on various aspects of the slides.

Activity II. Prediction of City Growth

The nature of learning in any lasting sense of the term is most clearly brought out when we consider scientific ways of thinking. Prediction is central to such thinking. In the past, various assumptions about the nature of learning have given rise to practices that are inimical to scientific ways of thinking. It is probable that these assumptions were misrepresentations of useful guidelines but in fact they have brought world studies into disrepute as intellectually rigorous subjects. Here are a few examples.

Teachers are told to study effects of human activities before causes. In practice the effects are first studied, and then the causes are either presented or induced from documentary materials. Rarely does a teacher fail to find 'the causes', and so the student is left with a very naive view of human activity, one which suggests that we know the causes of everything that happens.

Another assumption about learning is that inductive modes of thinking can be separated from deduction. As a result students are often persuaded to investigate problems in ways that confuse the normal processes of thought. Still another unfortunate assumption—one that persists more strongly than the previous two—is that the real world and our perceptions of the real world (the mental maps or the theories or the models of reality that are in our heads) are separable. As a result students are urged to study 'reality' via field study or via simulated field study in the form of pictures, word pictures, or films. The teacher is puzzled when he finds that he cannot match the many 'realities' that result from such study with his own 'reality'.

Recent investigations into the nature of thinking have established more clearly than ever that learning in something that learners, and only learners can do. Teachers can only teach, and there is no necessary connection between teaching and learning. All a teacher can do is understand learning and then seek out ways of supporting and encouraging it. Nowhere is it more important for teachers to recognize these facts than in the process of developing rational, scientific styles of thinking—styles of thinking that will increase the amount of rational processes that enter into a citizen's decisions.

This activity begins with an assessment of the amount of information on Asian Cities that students already have, together with their ability to defend choices based on their own assumptions. In order to provide for the big differences existing in every class, a hypothetical site diagram Fig. 1 with minimum data is provided. By choosing a hypothetical diagram no one can tell a student that his or her answer is right or wrong. Only the logic of a particular choice can be criticized. In the process of small group discussion that is part of the exercise, students gather a great deal of information from their peers on site selection factors. They also develop an attitude toward knowledge—that it is not fixed but is constantly changing as new facts emerge.

Following the site diagram exercise students are asked to apply their knowledge by predicting the growth of Southeast Asia Cities. Some additional information is provided to assist them in their predictions. Once their decisions are made documentary evidence is presented by the teacher and students are asked to consider why their predictions are different (as they usually are) from the reality. The prediction exercise is then repeated for later periods of time with more information being provided. Prediction should improve with successive efforts because the amount of information available to the student is steadily increasing.

Two very important considerations lie behind these prediction exercises. In the first place the differences between prediction and reality make clear that we cannot always know the reasons for human activity. Even when we acquire large amounts of information we cannot always guarantee precision in forecasting the details of human activities.

The second consideration concerns the asking of questions—who asks them, and to whom are they addressed? It is the person who asks questions who gets answers. We know this. In practice teachers keep asking the questions yet students are expected to get the answers. What is needed is a changeover to a situation in which students ask the questions. The disparity between prediction and reality provides the opportunity for such a changeover. Students can be asked, 'What additional information might have improved your predictions? You may ask for further information in the next prediction exercise and, if I have it, I will give it to you'. It may be difficult for a teacher to provide the information requested but, at least, the questioning has been placed in the students' hands.

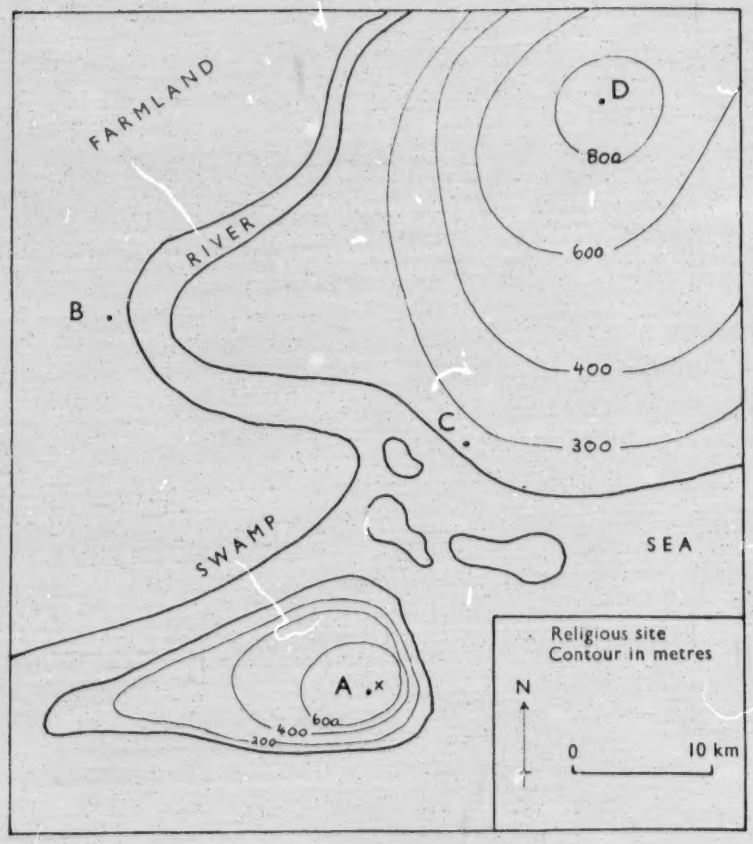


Fig. 1 Hypothetical Site Diagram.

There is a further consideration. Students can be taught to ask questions that are answered from documentary sources rather than from the teacher. Documentary sources are more scientific as sources of information. A slight variation of this method is based on the TV program 'Twenty questions'. Students can ask any questions that might help them in their predictions (up to a maximum of 20). The teacher can answer yes or no only, but cannot give an opinion or answer questions that are directly related to the prediction in question.

The procedure to be followed in this activity is as follows:

Show class situation between 1900 and 1910 using overhead transparency and discuss situation of that time and some effects of World War One. Students then predict top two cities for the period 1930–40 (they may use library and other information if time allows). Show 1930–40 transparency and discuss differences. Repeat for 1965 using wall map to check prediction. This time students can work with historical map sheet and population statistics provided to improve their predictions. This time also ask them to predict the one biggest city (not the two biggest). Finally repeat for 1971 for the one biggest city and use table of city populations (Table 1), to check predictions.

TABLE 1

SOUTHEAST ASIA CITY POPULATIONS OF ONE MILLION OR MORE IN 1971

Jakarta	4.6 million	Surabaya	1.6 million
Hong Kong	3.9 million	Manila	1.4 million
Singapore	2.1 million	Pnom Penh	1.2 million
Bangkok	2.0 million	Bandung	1.2 million
Saigon	1.7 million	Hanoi	1.0 million
Rangoon	1.7 million		

TABLE 2

1971 WORLD POPULATION DATA SHEET

(REVISED EDITION) AUGUST 1971

Region or Country	Population Estimates Mid-1971 (millions)	Annual Births per 1,000 Population	Annual Deaths per 1,000 Population	Annual Rate of Population Growth (percent)	Number of Years to Double Population	Annual Infant Mortality (Deaths under one year per 1,000 Live Births)	Population under 15 Years (percent)	Population Projections to 1985 (millions)	Per Capita Gross National Product (U.S. $)
WORLD	**3,706**	**34**	**14**	**2.0**	**35**	—	**37**	**4,933**	—
Northern America	**229**	**18**	**9**	**1.2**	**58**	—	**30**	**280**	—
Canada	21.8	17.6	7.3	1.7	41	20.8	33	27.3	2,460
United States	207.1	18.2	9.3	1.1	63	19.8	30	241.7	3,980
ASIA	**2,104**	**38**	**15**	**2.3**	**31**	—	**40**	**2,874**	—
Southwest Asia	**79**	**44**	**15**	**2.9**	**24**	—	**43**	**121**	—
Cyprus	0.6	23	8	0.9	78	27	35	0.7	830
Iraq	10.0	49	15	3.4	21	—	45	16.7	260
Israel	3.0	26	7	2.4	29	23	33	4.0	1,360
Jordan	2.4	48	16	3.3	21	—	46	3.9	260
Kuwait	0.8	43	7	8.2	9	36	38	2.4	3,540
Lebanon	2.9	—	—	3.0	24	—	—	4.3	560
Muscat and Oman	0.7	42	11	3.1	23	—	—	1.1	250
Saudi Arabia	8.0	50	23	2.8	25	—	—	12.2	360
Southern Yemen	1.3	—	—	2.8	25	—	—	2.0	120
Syria	6.4	47	15	3.3	21	—	46	10.5	210
Turkey	36.5	43	16	2.7	26	155	44	52.8	310
Yemen (Arab Republic)	5.9	50	23	2.8	25	—	—	9.1	70
Middle South Asia	**783**	**44**	**16**	**2.7**	**26**	—	**43**	**1,137**	—
Afghanistan	17.4	50	26	2.5	28	—	—	25.0	80
Bhutan	0.9	—	—	2.2	32	—	—	1.2	60
Ceylon	12.9	32	8	2.4	29	48	41	17.7	180
India	569.5	42	17	2.6	27	139	41	807.6	100
Iran	29.2	48	18	3.0	24	—	46	45.0	310
Nepal	11.5	45	23	2.2	32	—	40	15.8	80
Pakistan	141.6	50	18	3.3	21	142	45	224.2	100
Southeast Asia	**295**	**43**	**15**	**2.8**	**25**	—	**44**	**434**	—
Burma	28.4	40	17	2.3	31	—	40	39.2	70
Cambodia	7.3	45	16	3.0	24	127	44	11.3	120
Indonesia	124.9	47	19	2.9	24	125	42	183.8	100
Laos	3.1	42	17	2.5	28	—	—	4.4	100
Malaysia	11.1	37	8	2.8	25	—	44	16.4	330
Philippines	39.4	46	12	3.4	21	72	47	64.0	180
Singapore	2.2	25	5	2.4	29	—	43	3.0	700
Thailand	37.4	42	10	3.3	21	—	43	57.7	150
Vietnam (Dem. Republic of)	21.6	—	—	2.1	33	—	—	28.2	90
Vietnam (Republic of)	18.3	—	—	2.1	33	—	—	23.9	130
East Asia	**946**	**30**	**13**	**1.8**	**39**	—	**36**	**1,182**	—
China (Mainland)	772.9	33	15	1.8	39	—	—	964.6	90
China (Taiwan)	14.3	26	5	2.3	31	19	44	19.4	270
Hong Kong	4.3	21	5	2.5	28	21	40	6.0	710
Japan	104.7	18	7	1.1	63	15	25	121.3	1,190
Korea (Dem. People's Rep. of)	14.3	39	11	2.8	25	—	—	20.7	250
Korea (Republic of)	32.9	36	11	2.5	28	—	42	45.9	180
Mongolia	1.3	42	10	3.1	23	—	44	2.0	430
Ryukyu Islands	1.0	22	5	1.7	41	11	39	1.3	580

WORLD AND REGIONAL POPULATION (millions)

	World	*Asia*	*Europe*	*USSR*	*Africa*	*North America*	*Latin America*	*Oceania*
Mid-1971	**3,706**	**2,104**	**466**	**245**	**354**	**229**	**291**	**20**
UN Medium Estimate, 2,000	**6,494**	**3,777**	**568**	**330**	**818**	**333**	**652**	**35**

Population Reference Bureau, Inc., 1755 Massachusetts Avenue, N.W., Washington, D.C. 20036 (202) 232-2288

Fig. 2 SOUTH-EAST ASIA CITY POPULATION 1900–1960

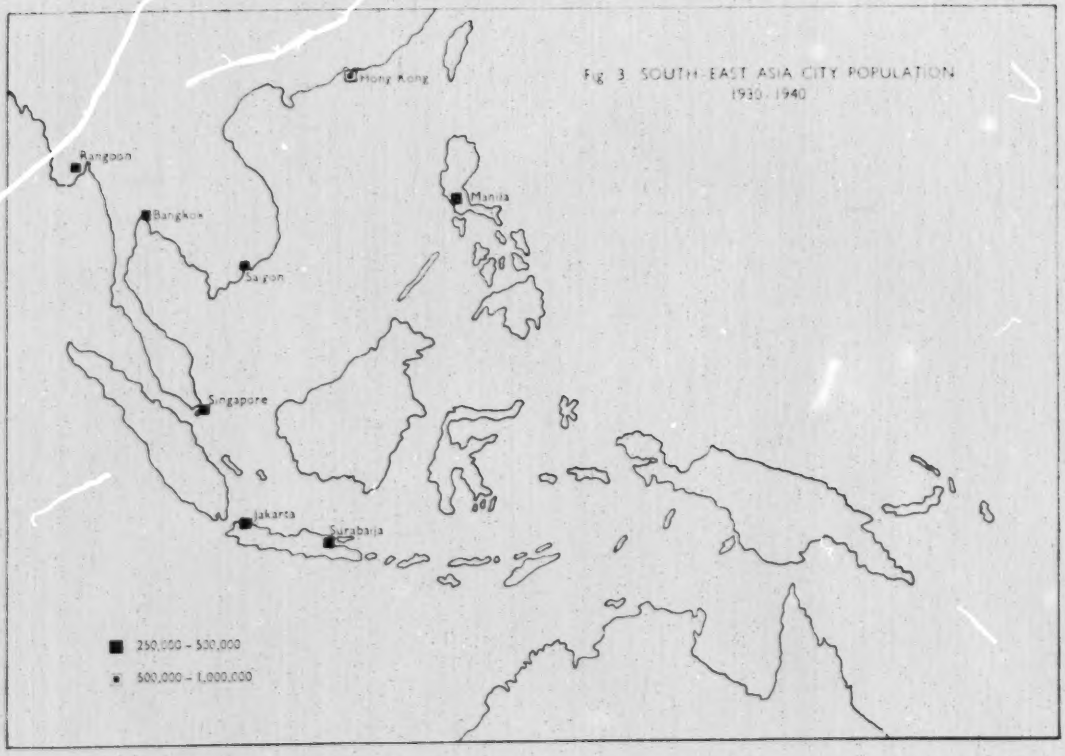
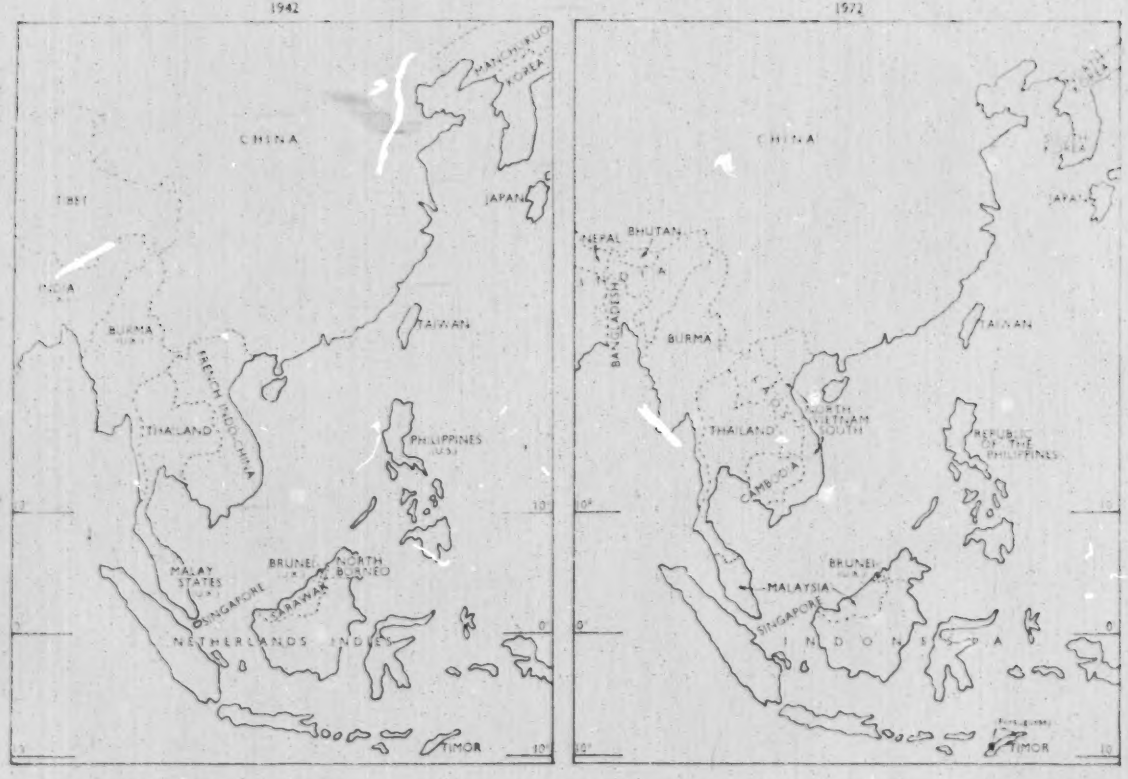


Fig. 3 SOUTH-EAST ASIA CITY POPULATION 1930–1940

Fig. 4 POLITICAL DIVISIONS OF SOUTHEAST ASIA



Activity III. Field Studies

Field studies rarely form integral parts of a school sequence of work. In spite of the high regard in which they are held--for some they are said to be the indispensable foundation for all classroom work--they continue to be interruptions in rather than extensions of the work of the classroom. Even where they are uniquely suited to the task in hand, as in the case with map work, they are employed in a way that is not related to previous and on-going classroom endeavors.

Much of the inadequacy of field work stems from the constraint imposed in the classroom before going out. Students are told what to look for either in details (a set of specific questions) or in academic categories like residential area, industrial landscape, CBD, or commercial district. The student is made to think 'in definitions' as one writer has put it. All the richness of a field trip in relation to concept development is lost when this kind of constraint is given. Labels and definitions only have meaning in relation to the levels attained by particular students and there should be as many labels for any one object as there are levels of concept attainment. A few comments on concept development will illustrate this point.

A concept is not a concrete entity in nature. It is a construct of the mind, a set of activities within the nervous tissue of the brain. It is the effort of a person to comprehend some reality. The impression that first registers in the mind is neither accurate nor complete. Concept change with added experience, especially with very young people, all ages experience concept development. The more one looks the more one recognizes and understands, and the more complete and the more accurate become the concepts.

With these ideas in mind consider the purpose of field study as an integral part of the land use simulation which follows as the fourth and final activity. In that activity students will be asked to decide what is 'good' land use and what is 'bad' land use. They will also be required to use standard land use labels like industrial, park space, and public transportation. Field Studies such as the following will help to prepare them for the simulation.

(1) Divide class into two groups. Assign one group to go out and identify 'bad' use of land. The second group identify 'good' use of land. Ask groups to identify 10 examples of 'bad' and 10 examples of 'good'. On return to the classroom reduce their lists by discussion of privities to 5 examples of each. (This field study could be done as a homework assignment.)

(2) Take class on a local urban field trip with detailed instructions for observing, recording, and sketching particular areas. Do not give them any land use classification to work on but ensure that the instructions cover all the types of land use to be encountered in the simulation. On return to the classroom assemble students' data, ask them to classify their reports in labels of their own choice. When this is all done tell them the list of labels frequently used by geographers for the same categories.

(3) As a alternative to No. 2, pictures of the local area might be used in the classroom.

Activity IV. Land Use Simulation

Simulation games have proved their worth in recent years by heightening interest in the study of particular topics, and by developing peer group learning. These games have taken a variety of forms—ordinary game boards like monopoly, action games of non-verbal character, and role play simulations involving decision-making. The last-named is the type employed in this activity.

Following the field trip students are presented with a land use map of Lower Kowloon showing the approved plan for all of the area except the railway yards. This plan is their worksheet for discussion and insertion of a recommended plan for the railway yards in accordance with the information provided in the student sheet. An overhead of the same map is provided for the teacher for discussion of the problem with the students. At the conclusion of the exercise the official plan for the railway yards is presented on an overhead and differences between this map and the students' maps are then discussed. The lessons in this fourth activity might go something like this:

1st lesson — Discussion of overhead of land use map (1).

Teacher to point out such considerations as:

—population in the area is expected to double by 1980

—one tenth of all new commercial/residential space should be provided as new park space

—recent complaints in newspapers about the serious air pollution problem in Lower Kowloon

—no buildings can be higher than 200 feet

—Kowloon people want some kind of a civic centre with a town hall, exhibition hall, library, sports stadium, museum, ping-pong rooms

—all land is leased on a 50 year basis for purposes of this simulation.

2nd lesson — Students in groups of 5–10 each discuss and decide on land use. Three role profiles are provided for three groups (See Part A below). If there are more than three groups then two groups can have the same role.

3rd lesson — Each group appoints a leader to report orally on the group's plan, then leaves the map on display. After all groups have reported and answered questions there is a general discussion on all of the reports.

4th lesson — A composite map is made incorporating the best ideas from all the groups (as determined by class majority vote). This map which is to be sent to the Chief Planning Officer as ideas for his consideration, is compared with the official plan for the railway yards and their differences are then discussed.

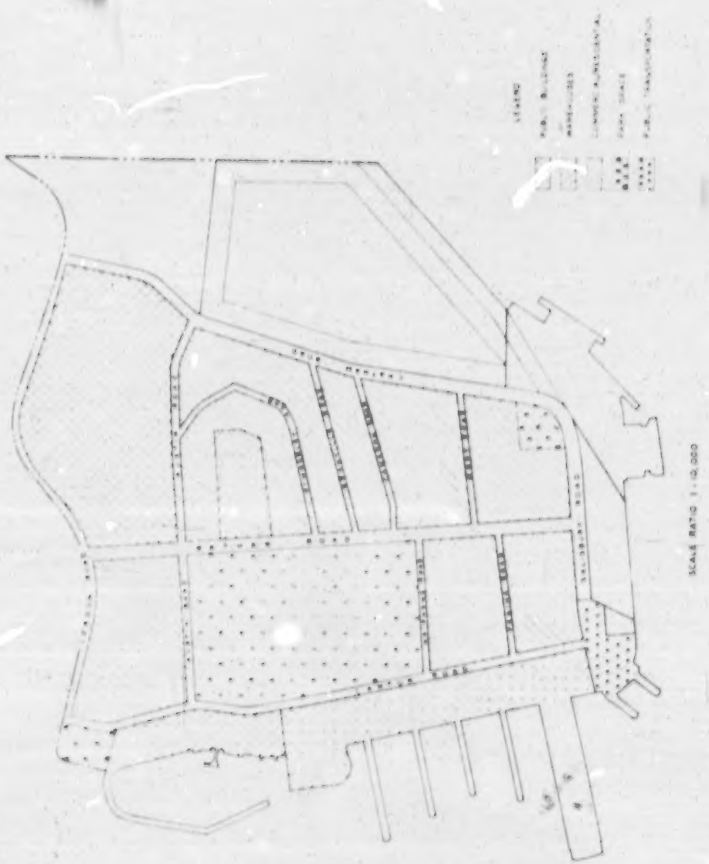


Fig. 5 Kowloon Land Use Plan (1).

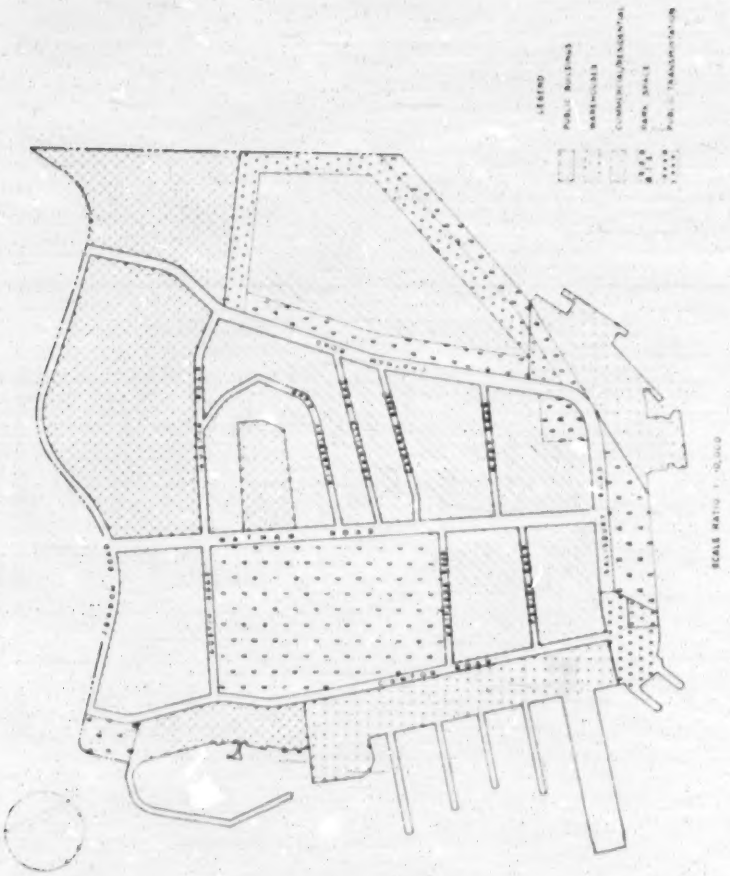


Fig. 6 Kowloon Land Use Plan (2).

Role Profiles and Background Materials to the Land Use Simulation

PART A

The Governor and Executive Council of Hong Kong have been encouraging people to suggest ideas for land use in the Colony and you are given the task of suggesting future land uses for the railway yards in Lower Kowloon. This land will be available for new uses as soon as the new railway station is opened. There are three main groups interested in the new land use – the Government, business people, and private citizens— and you will take the position of one of these groups in working out a plan. Some ideas will be given to you to help you defend the interests of your group. Your first task is to appoint a Chairman for your group. This person will present to the class the reasons for the plan that you finally make. It is essential that you plan the use of the land so that the Government will not lose money on the developments in the area as a whole. At the same time you must consider the dangers of pollution, the need to avoid unpleasant factories or noisy playgrounds in front of the big tourist hotels, and the demands by citizens for more public space for parks or concert halls or museums etc. The land values for each of the five possible uses for all eight blocks of land are shown below. That is, if you decide on public space, parklands, public transportation, the costs shown in the table will all be carried by the Government. If you decide on commercial/residential and warehouses the costs will be carried by someone else and they will pay the amount in the table to the Government.

Block	*Public Buildings*	*Warehouses*	*Commercial/ Residential*	*Park Space*	*Public Transportation*
	(costs in thousands of Hong Kong dollars)				
A	50	100	150	50	50
B	600	1,200	1,800	600	600
C	200	400	600	200	200
D	400	800	1,200	400	400
E	800	1,600	2,400	800	800
F	400	800	1,200	400	400
G	100	200	300	100	100
H	600	1,200	1,800	600	600

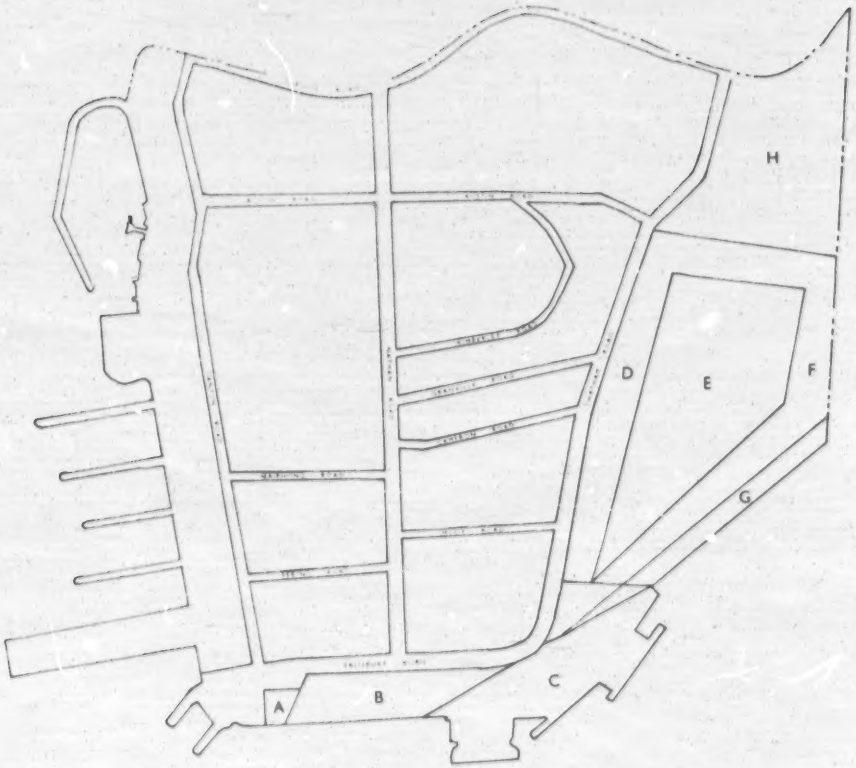


Fig. 7 Plan to show blocks of land in the railway yard of Lower Kowloon.

Government Interests

The Government is anxious to gain public support for its land use plans because it feels that this will make it easier to gain support for anti-crime, and anti-litter campaigns. At the same time there must be no new costs that result from land use plans because the Colony debt is already as high as it can go. Plans that will convince the Government of China that the Hong Kong authorities are genuinely concerned about the ordinary people will be very popular with the colonial authorities in England.

Business Interests

Business concerns are all related to activities that will get quick returns on money invested, like hotels and restaurants. No one is sure enough about the political situation to risk money on a long-term basis. One of the strongest arguments of business is that tourism is good for the area. People spend money in all sorts of ways and small Chinese business concerns can make as much profit as the big hotels.

Private Citizens Interests

As a private citizen your main concern is for more space for children to play, fewer tourists because tourists always make things more expensive, and more recreational activities for adults—theatres, parks, a sports stadium. You are also concerned about air pollution so you oppose new factories. In fact you really would like to keep things pretty much as they are except for recreational activities.

PART B

Government of Hong Kong

Constitution

Hong Kong is a British Crown Colony and the principal features of the constitution are prescribed in Letters Patent passed under the Great Seal of the United Kingdom, which provide for a Governor, an Executive Council and a Legislative Council.

Executive Council

This Council, which is presided over by the Governor, consists of five *ex officio* and one nominated official member, and eight unofficial members nominated by the Governor. The *ex officio* members are the Commander British Force, the Colonial Secretary, the Attorney General, the Secretary for Home Affairs, and the Financial Secretary. The eight unofficials at present include four Chinese members.

The main function of the Executive Council is to advise the Governor, who must consult its members on all important matters. The Governor in Council (i.e. the Governor in the Executive Council) is also given power under numerous ordinances to make subsidiary legislation by way of rules, regulations and orders. A further function of the Council is to consider appeals and petitions under certain ordinances.

Legislative Council

The official membership of this Council consists of the Governor (who is both the president and a member), four *ex officio* members (the same as on the Executive Council with the exception of the Commander British Forces) and ten official members. There are fifteen unofficial members, nominated by the Governor. At present they include ten Chinese members, one of them a lady.

The laws of the Colony are enacted by the Governor with the advice and consent of the Legislative Council. Matters of public concern may be debated in this Council, which also controls finance and expenditure through its Finance Committee. Procedure in the Legislative Council is based generally on that of the House of Commons.

Urban Council

In addition to the above two Councils there is the Urban Council which consists of twenty-six members—six *ex officio* members and twenty ordinary members of whom ten are elected and ten appointed by the Governor. The responsibilities of the Urban Council, which are carried out through the Urban Services Department cover the fields of environmental hygiene, sanitation, public parks and amenities in the urban areas. All members of the Urban Council are also members of the Hong Kong Housing Authority which is responsible for the building and maintenance of a number of low cost housing estates throughout the Colony.

PART C—OTHER ILLUSTRATIONS OF LOWER KOWLOON (SLIDES AND AERIAL PHOTOS)

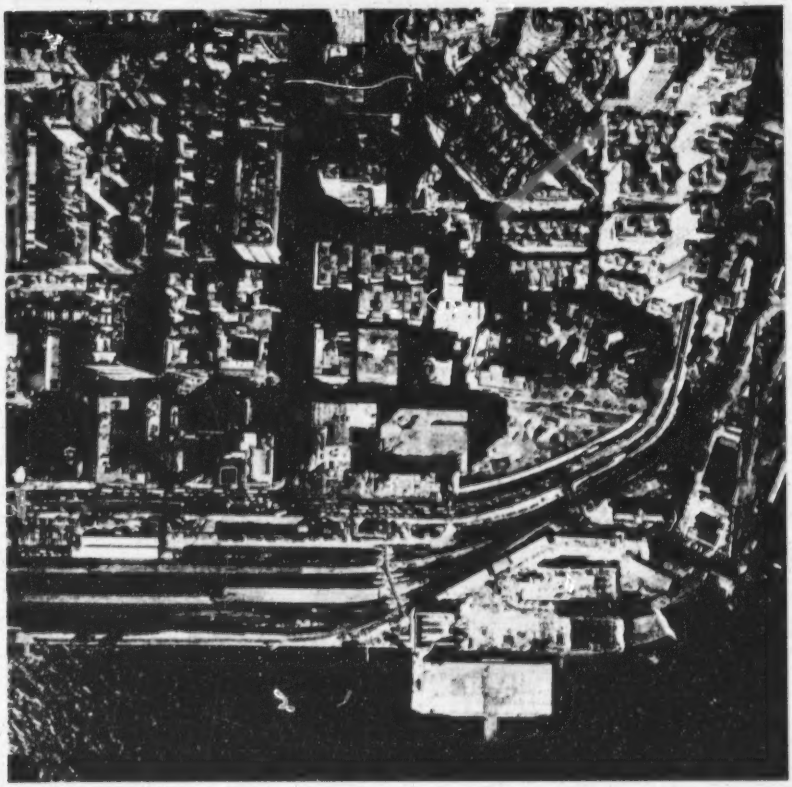


Fig. 8A Vertical aerial photo of Kowloon Planning Area.

Fig. 8B Vertical aerial photo of Kowloon Planning Area.

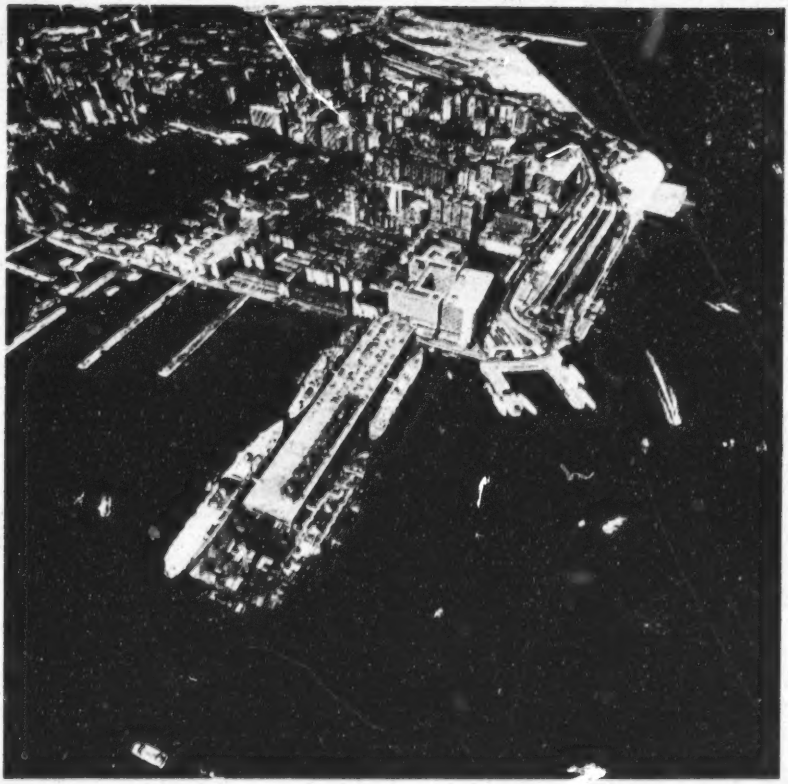


Fig. 8C High oblique aerial photo of Kowloon Planning Area.

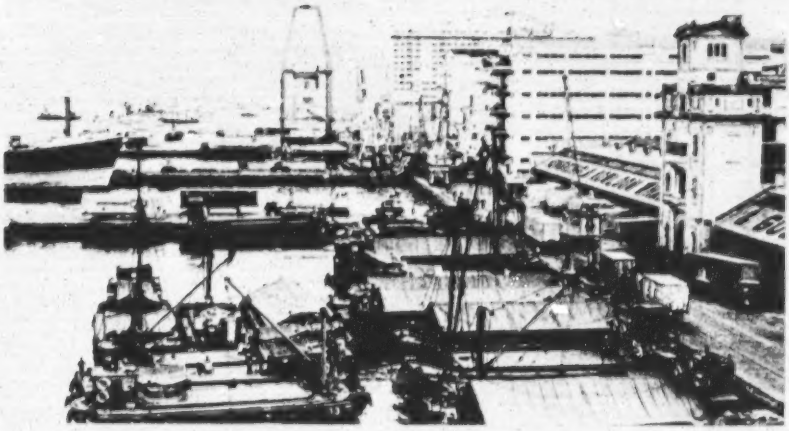


Fig. 9A Piers & Warehouses on the West side of Lower Kowloon.

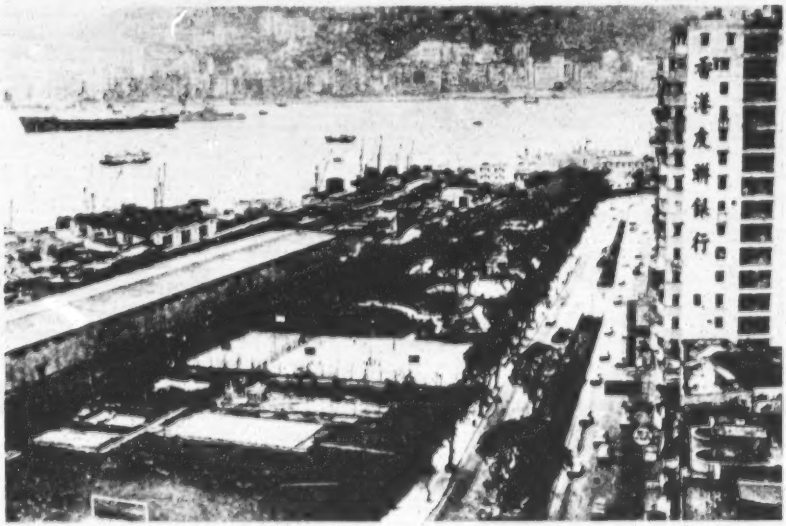


Fig. 9B Looking South at East side of Lower Kowloon (Kowloon Planning Area on left).

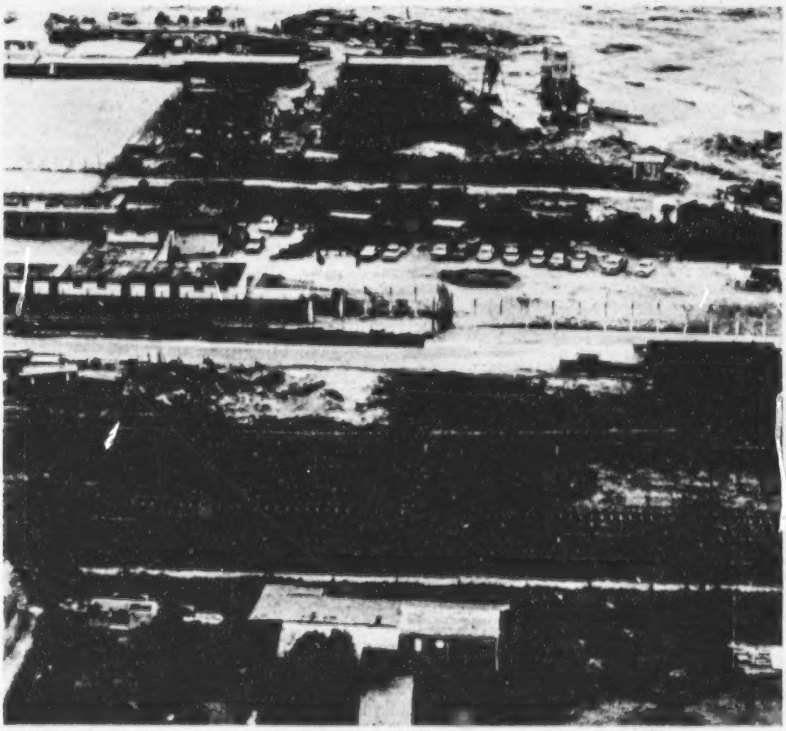


Fig. 9C Looking East from same point as 9B.

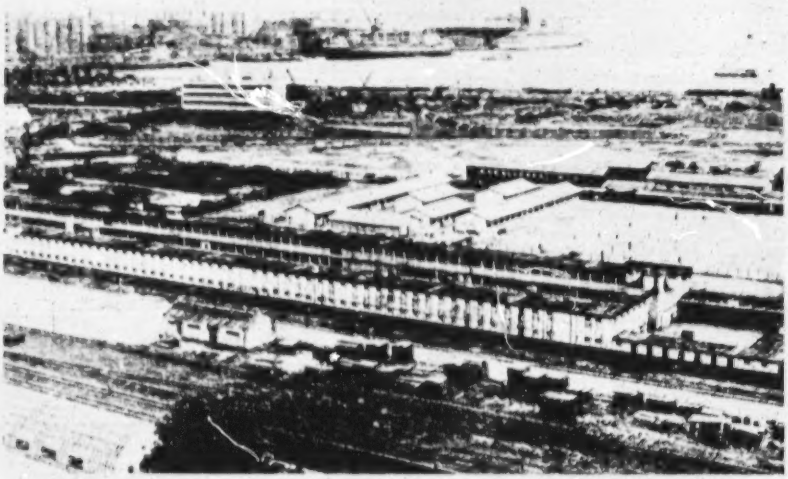


Fig. 9D Looking Northeast from same point as 9B.

Fig. 9E Looking North from same point as 9B.

REFERENCES

THE American High School Geography Project:
Geography in an Urban Age—Units 1 to 6, New York: Macmillan, 1970.
The Local Community: A Handbook for Teachers.

BACON, Phillip, (Ed.) 'Focus on Geography—Key Concepts and Teaching Strategies' 40th Year Book. National Council For the Social Studies, Washington, D.C., 1970.

BREESE, G. (Ed.) 'A Bibliography of Urban Southeast Asia'.

DWYER, D. J., (Ed.) 'The City as a Centre of Change in Asia' Hong Kong University Press, 1972.

DWYER, D. J., (Ed.) 'Asian Urbanization—A Hong Kong Casebook' Hong Kong University Press, 1971.

GUNN, Angus M., (Ed.) 'High School Geography Project—Legacy for the Seventies' Centre Educatif Et Culturel, Inc., Montreal, 1972.

Hong Kong Town Planning Board 'Tsim Sha Tsui Outline Use Zoning Plan' Hong Kong Government Printer, 1967.

LIANG, Chi-sen 'Urban Land Use Analysis—A Case Study on Hong Kong' Ernest Publication, Hong Kong, 1973.

LIANG, Chi-sen and LIANG, P. L. 'A Systematic Approach to Human and Economic Geography' The China Geographical Model Manufactory, 1974.

McGEE, T. G. 'The Urbanization Process in the Third World' G. Bell and Sons Ltd., London, 1971.

McGEE, T. G. 'The Southeast Asian City' G. Bell and Sons Ltd., London, 1967.

McGEE, T. G. and DRAKAKIS-SMITH, D. 'Fieldwork in Urban Geography: Hong Kong and Macao' Longman, 1974.

PATTON, Donald, (Ed.) 'From Geographic Discipline To Inquiring Student—Final Report on The High School Geography Project' Association of American Geographers, Washington, D.C., 1970.

NOTES ON CONTRIBUTORS

A. M. GUNN

Prof. Angus M. GUNN is currently Associate Professor of Education and Chairman of the Department of Social Studies at the University of British Columbia. He took his M.A. from the same university, specializing in geography. He has held visiting professorships at Western Washington State College and the University of Toronto and has authored and supervised the production of filmstrips for the National Film Board of Canada and telecasts for the Canadian Broadcasting Corporation's school programmes. He has also been consultant on educational television and on geography to school districts and departments of education in Canada and in many other parts of the world. He was Assistant Director of the American High School Geography Project form 1968–69. Prof. GUNN has contributed articles to numerous periodicals and his books include 'Vancouver Profile', 'British Columbia: Landforms and Settlement', 'Patterns in World Geography' and 'Man's Physical Environment'.

D. J. DWYER

Dr. D. J. DWYER has been Professor of Geography at the University of Hong Kong since 1967. He has wide university experience in East and Southeast Asia and has travelled extensively as a consultant on the subject both in Asia and in Latin America. He is also a member of The Hong Kong Town Planning Board. Prof. DWYER has contributed to various journals on problems of Asian economic development with special reference to urbanization. He was also editor of two books on this subject, viz. 'Asian Urbanization—A Hong Kong Casebook' and 'The City as a Centre of Change in Asia'.

C. S. LIANG

Dr. Che-sen LIANG is Lecturer in Geography at Chung Chi College, The Chinese University of Hong Kong. He gained his early training in China and at the University of California, Berkeley and received his doctorate degree in Urban Geography from the University of London. Dr. LIANG's main interests are in Urban Geography and Statistical Analysis

in Geography. He initiated an urban land use survey in Hong Kong and Kowloon during 1966–1971 with the financial assistance of The Chinese University of Hong Kong. The reports of the survey became the chief sources of data for his research. Dr. LIANG's publications include papers on the urban geography of Hong Kong and recently a book, on the same subject: 'Urban Land Use Analysis: A Case Study on Hong Kong'.

ACKNOWLEDGEMENT

The three aerial photos of Kowloon used in Figs. 8A–8C are reproduced by kind permission of the Crown Lands and Survey Office, Public Works Department, Hong Kong.